

POWER TOOLS

**TOPIC:** POLE SAW SAFETY AWARENESS

TIME FRAME: :30

**LEVEL of INSTRUCTION:** Level I

**BEHAVIORAL OBJECTIVE:** 

**Condition:** A written quiz

**Behavior:** The student will gain a basic understanding of the safety

considerations necessary when working around pole saws.

**Standard:** With a minimum 80% accuracy according to the information

contained in the lesson plan

**MATERIALS NEEDED:** • Writing board with markers/erasers

Appropriate video equipment and screen

Pole saw

Appropriate wildland PPE per CAL FIRE policy

REFERENCES:

• Stihl HT 100, 101, 130, 131 Instruction Manual, Stihl

• Husqvarna 327P4/327P5 X-Series Operator's Manual,

Husqvarna

• NWCG Wildland Fire Chain Saw S-212 Instructor's Guide,

NFES 1999 February, 2004

**PREPARATION:** Pole saws in the fire service have become an integral part of

the job today. A pole saws primary use is for limbing, but has many other applications in the fire service. They can be used in line construction, ventilation and heavy rescue applications. The ability to safely and competently use a pole saw could make the difference between a successful operation, or an operation that fails and is prone to serious safety risks.

**PRESENTATION** APPLICATION I. **DEFINITION** Α. A fixed, telescoping or multi-piece pole with an internal combustion engine with chainsaw attachment, able to limb branches above ground up to sixteen feet distance. II. **FUNCTION/PURPOSE** Α. Pole saws are designed to eliminate the use of a chainsaw beyond the users arm reach allowing for up to sixteen feet of extension. Provide a method to remove material that is out of B. reach while maintaining secure footing on the ground. III. PERSONAL PROTECTIVE EQUIPMENT (PPE) **REQUIRED FOR POLE SAW OPERATIONS** Safety items that must be used while operating or Α. working around pole saws 1. Approved hardhat (NFPA 1977) 2. ANSI approved eye protection per CAL FIRE policy 1723.1

Appropriate gloves, heavy-duty, cut-resistant or

3.

leather

	POLE SAW SAFETY AWARENES		
	PRESENTATION	APPLICATION	
4.	Heavy duty 8-inch high laced boots with deeply lugged soles and heels or structure fire boots		
5.	Hearing protection (85 decibels and higher pole saw process 110-120 decibels)		
6.	Long-sleeved shirt, Nomex fire shirt, or structure fire turnout coat		
7.	Pants, bloused (optional)		
8.	Kevlar chaps with a 2-inch boot overlap		
	a) Per CAL FIRE policy		
	b) Treat your Kevlar chaps as a CRITICAL piece of safety equipment. Keep them as clean as possible		
9.	Bar cover		
10.	Full wildland PPE when working on a wildland fire per CAL FIRE policy		
11.	Full structure fire PPE when working on a structure fire per CAL FIRE policy		
B. Ger	eral PPE requirements		
1.	Select PPE based on hazard identified in the CAL FIRE Policies and Procedures handbook		

POLE SAW SAFETY AWARE				SAW SAFETY AWARENESS
			PRESENTATION	APPLICATION
		a)	PPE shall fit properly	
		b)	Defective, damaged, or unsanitary PPE shall not be used	
		c)	Supervisors shall ensure the PPE is adequate, properly maintained, and sanitary	
C.	Spe	cific F	PPE requirements	
	1.	Eye	and face protection	
		a)	Shields and or ANSI approved safety glasses may be used per CAL FIRE policy	
		b)	Goggles are to be used on wildland fires per CAL FIRE policy	
			Goggles can fog causing reduced visibility	
	2.	Nois	se protection	
		a)	Hardhat / shield / ear protection combinations designed for saw use may be used in non-fire situations	
		b)	In wildland fire situations ear plugs work well with the approved PPE	

	POLE	SAW SAFETY AWARENESS	
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3.	Head protection		
	a) Hardhat / shield / ear protection combinations designed for pole saw use may be used in non-fire situations		
	b) An approved NFPA 1977 compliant wildland helmet will be used on all wildland fires		
4.	Hand protection: Gloves to prevent		
	a) Cuts		
	b) Abrasions		
	c) Burns		
	d) Skin contact with chemicals		
5.	Foot protection		
	a) Per CAL FIRE policy		
6.	Additional protection: Kevlar chaps or other PPE that provide cut resistance or puncture protection		
	Kevlar chaps protect the legs by resisting the cut, then jamming the saw chain so it stops		

	POLE	POLE SAW SAFETY AWARENESS	
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	1) Cordura and Kevlar		
	Fibers bind up and stop moving chain		
	b) When Kevlar chaps are exposed to temperatures higher than 500 degrees Fahrenheit, the nylon shell may melt, but the protective Kevlar pad will not burn		
	c) Kevlar chaps need to be properly adjusted and worn snug to keep them positioned correctly on the legs. Proper fit and correct length (two inches past the boot top, or clear to the instep) maximize protection		
7.	Bar Cover		
	Can be pre-manufactured by pole saw manufacturers or a common improvisation is to use hose to cover the bar and chain		
8.	Optional shoulder strap		
	a) May be used when carrying pole saws long distances		

		PRESENTATION	APPLICATION
. SAFETY CONSIDERATIONS WHEN WORKING AROUND POLE SAWS			
			Student Information Sheet #1
A.	Trai	nsporting the Pole Saw	
	1.	Carry only in the horizontal position with power head facing forward	
		The muffler and power head can reach extremely high temperatures. Avoid contact with these areas when carrying a pole saw that has been used recently	
	2.	Always switch off the engine and use a bar cover before transporting the pole saw over long distances	
			Student Information Sheet #2 through #4
В.	Lim	bing	
	1.	When working with a sawyer who is limbing a standing tree, stay clear of the area where the limb may fall or roll after landing	
	2.	Make sure the sawyer knows when you are going to remove the cut limbs	
	3.	Limbs may have a bind or a load	
	A.	A. Trai  1.  2.  1.  2.	A. Transporting the Pole Saw  1. Carry only in the horizontal position with power head facing forward  a) The muffler and power head can reach extremely high temperatures. Avoid contact with these areas when carrying a pole saw that has been used recently  2. Always switch off the engine and use a bar cover before transporting the pole saw over long distances  B. Limbing  1. When working with a sawyer who is limbing a standing tree, stay clear of the area where the limb may fall or roll after landing  2. Make sure the sawyer knows when you are going to remove the cut limbs

POLĘ SAW SAFETY AWARE		
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a)	They can move quickly and violently when cut	





## SUMMARY:

Pole saws are an important part of emergency incidents and projects. Training in the proper use, care and maintenance is required prior to operating a pole saw. Working around a pole saws is dangerous and failure to follow the appropriate safety precautions can result in serious injury or death.

## **EVALUATION:**

The student will complete the written quiz at a time determined by the instructor.